

Benefits of Land Preservation



*Considerations for the Preservation of
Open Space and Farmland in New Jersey*

GARDEN STATE PRESERVATION TRUST

2003

Garden State Preservation Trust

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Cover photos: upper right - Branch Brook Park (Green Acres Program, NJDEP); lower right - Windsor Farm (NJ Dept. of Agriculture); lower left - Bald Eagle (US Fish & Wildlife Service); upper left - Historic Batsto Mansion (NJ Pinelands Commission)

This publication summarizes some of the many benefits of land preservation, including aesthetic, economic, educational, environmental and recreational benefits.

Economic Benefits

The preservation of land in New Jersey is an investment that produces important and myriad economic benefits.

Attraction and Retention

Preserved lands contribute to a high quality of life for residents. Indeed, New Jersey's natural and scenic characteristics are key among the factors that inspire people to both visit our state and to make their homes here. Similarly, outdoor recreational facilities close to home are essential to maintaining a high quality of life. Preserved land and recreational opportunity are also among the important factors that attract and retain businesses.

Tourism

Tourism continues to be a driving force in New Jersey's economy, ranking second after the pharmaceutical industry. Travel and tourism expenditures in New Jersey totaled \$31 billion in 2001.¹

New Jersey's travel and tourism industry rests in large part on the strength of the state's special environmental, scenic, cultural and heritage resources. The overall impact from nature-related tourism in the state is estimated at several billion dollars annually.



Wawayanda Lake (*Division of Parks & Forestry, NJDEP*)

For example, New Jersey is recognized as a great beach destination, and 12% of overnight leisure travelers came to enjoy the state's beaches in 2001.² New Jersey's coastal tourism industry depends on conventional attractions and activities like its beaches, boardwalks and family resorts. Maritime history, historic sailing vessels, lighthouses, nature centers, aquaria, seaports, historic coastal communities, and the art of decoy carving are all also components of coastal tourism.³

One prominent example of coastal ecotourism contributing to New Jersey's economic sector relates to widespread interest in shorebird migration. New Jersey's coast is the second largest stopover location in the western hemisphere for northward bound shorebirds. Delaware Bay shorebird migration viewing opportunities for thousands of visitors represent a gross economic value of \$34 million annually for the Delaware Bay area.⁴

Overall, wildlife enthusiasts who came to New Jersey last year to watch wildlife spent \$1.24 billion on hotel rooms, food and equipment, according to the 2001 National

1 N.J. Commerce and Economic Growth Commission, 2001. www.state.nj.us/commerce/travel_n_tour.html

2 N.J. Commerce and Economic Growth Commission, 2001. www.state.nj.us/commerce/travel_n_tour.html

3 Fermata Inc., Wildlife-Associated Recreation on the New Jersey Delaware Bayshore, Executive Summary, 2000. www.fermatainc.com/eco_crab.html

4 Fermata Inc., Wildlife-Associated Recreation on the New Jersey Delaware Bayshore, Executive Summary, 2000. www.fermatainc.com/eco_crab.html

Survey of Fishing, Hunting and Wildlife-Associated Recreation.⁵

Ecotourism activities popular in New Jersey - birding, hiking, biking, canoeing, hunting, fishing, camping - depend on healthy forests and woodlands, wetlands, lakes, rivers and streams. Habitats range from sandy beaches to dynamic salt marshes to dense maritime forests. These environments provide ecotourists a chance to visit barrier islands, wetlands, estuaries, bays and rivers, all of which serve as homes to exceptionally diverse groups of plant and animal life.⁶ New Jersey's ecological resources range in richness from the scenic mountains and valleys of the Skylands and Highlands regions to the unique Pinelands to the habitats of the Atlantic Coast and Delaware Bay.

Visitors to New Jersey's beaches, parks, forests, recreation areas and cultural areas are increasing in number. Recorded attendance at New Jersey state parks, forests, and recreation areas was more than 15 million in Fiscal Year 2000, with an estimated economic impact of several billion dollars.⁷ Visitation to state parks and other natural areas is expected to reach 17.5 million by 2005.⁸

Whether the destination is the New Jersey shore, state parks, or other areas throughout the state, tourism supports and creates jobs, provides a strong boost to local economies through investment in services, commodities and food, and creates revenue for the state

economy. Continued preservation and stewardship of distinctive recreational, scenic, historic and agricultural landscapes and amenities in the state are essential to a sustainable travel and tourism industry.

Jobs

New Jersey tourism directly and indirectly supports 836,000 jobs, generating \$17.7 billion in wages.⁹ Directly supported ecotourism employers include the state parks and forestry service for conservation and management of state parks and other public lands; visitor centers; and local outfitters, guides, and tour operators. Indirect beneficiaries of ecotourism include providers of regional and local goods and services, such as lodging, food, retail and transportation services.

Urban Revitalization and Economic Development

Passive and active recreational open spaces are both highly valued assets in New Jersey's urban centers. Well designed and maintained urban parks, gardens and recreational open space stimulate commercial growth and provide a focal point for revitalization efforts. Benefits of urban open space include increased investment by business, increased economic activity, attraction and retention of residents, tourism, and an overall improvement in the quality of urban life.¹⁰

5 U.S. Department of the Interior, Fish and Wildlife Service and U.S. Department of Commerce, U.S. Census Bureau. *2001 National Survey of Fishing, Hunting and Wildlife-Associated Recreation*, October 2002. www.census.gov/prod/www/abs/fishing.html

6 Kim Kosko, NOAA Research, Archive of Spotlight Feature Articles, "Ecotourism: A Natural Alternative for Exploring New Jersey," May 2001.

7 GSPT, *Stewardship: Taking Care Of Our State Public Lands*, 2001, Table 3: Park Visitation FY1990 – 2000, p. 15; James Hall, Assistant Commissioner for Natural Resources, NJDEP, Testimony before Senate Committee on Natural Resources, Trade and Economic Development, 1996 (cited in ANJEC, Resource Paper: Open Space Is a Good Investment – The Financial Argument for Open Space Preservation, 2002. www.anjec.org/pdfs/OpenSpaceGoodInvestment.pdf).

8 NJDEP, 2000, cited in GSPT, *Stewardship: Taking Care of Our State Public Lands Report*, 2001, p. 15.

9 N.J. Commerce and Economic Growth Commission, 2001. www.state.nj.us/commerce/travel_n_tour.html

10 Garden State Preservation Trust, *Annual Report 2001*, p. 55.

For example, Centennial Olympic Park in Atlanta, Georgia was built to serve as the central space of the 1996 Summer Olympics. This well-designed park reflects local character and provides surrounding properties with an attractive view. Business executives seek corporate addresses adjacent to this attractive park.

And, just as elsewhere, homebuyers desire neighborhoods with a high quality of life, with convenient access to permanently protected land, including parks, playgrounds, trails, greenways and natural open space.



Double Trouble State Park (*NJ Agricultural Society*)

Agriculture Industry

Covering about 20% of New Jersey's land area, farmland acreage totaled 830,000 acres in 1997.¹¹ New Jersey agriculture contributes \$62.5 billion to the state's economy and is the state's third largest industry, ranking just after the pharmaceutical industry and tourism in terms of the economic benefits it brings to the state.¹²

Garden State farms are diverse, raising livestock, poultry and produce, and yielding dairy products, field crops, sod, nursery stock and many specialty items. Horse farms give an important boost to our agriculture industry and afford equine enthusiasts hours of enjoyment. Vineyards develop wines unique to our state. New Jersey farmland generates an impressive variety of more than 100 types of "Jersey Fresh" grown fruits and vegetables. New Jersey farms are major producers of, for example, cranberries, blueberries, peaches, tomatoes, spinach and potatoes. Fruit and vegetable pick-your-own operations are ever popular.

Sustaining New Jersey farms yields multiple benefits, including:

- the state's agriculture industry contributes to local economies directly through sales, job creation and maintenance, support services and businesses, and also by supplying lucrative secondary markets such as food processing;
- products produced in-state have a shorter distance to travel to New Jersey consumers than do out-of-state products, thus reducing transportation costs and maximizing freshness;
- restaurants advertising the use of fresh and/or organic New Jersey produce often reap the benefits of supportive consumers;

¹¹ There are losses of more than 10,000 acres of farmland each year. In 1950, New Jersey had 26,900 farms covering 1.8 million acres; in 2000, there were 9,600 farms totaling 830,000 acres. N.J. Department of Agriculture, 2001 New Jersey Agriculture Annual Report; New Jersey Conservation Foundation, "The State We're In," October 7, 2002; Diamant, Jeff, "A Seed to Combat Sprawl is Planted on Farms: Jersey Boosts Demand for Agriculture with Ideas for New Products," *The Star Ledger*, November 8, 2002.

¹² New Jersey Conservation Foundation, "The State We're In," October 7, 2002.



Sun Valley Farm (*SADC, NJ Dept. of Agriculture*)

- access to local farms reduces the state's dependence on producers throughout the country, thus operating as a hedge against future food scarcity and increasing the security of our food supply in the event of natural and unforeseen disasters elsewhere, including frost, drought, or flooding;
- without locally-producing New Jersey farms, costs of agricultural products could rise

Avoided Costs

Open space and farmland preservation is a key component of a smart growth planning approach. Communities strategically protecting land can avoid the costs of urban and suburban sprawl. Avoided costs are some of the most valuable economic benefits of preservation.

They can range from the "hard costs" of new infrastructure demands and higher property taxes, to the costs resulting from traffic congestion and impaired ecological systems (including impaired water quality, depleted water supplies and droughts, flooding, impaired air quality, soil depletion, and fragmented wildlife habitat). A report prepared in 2000 for the New Jersey Office of State Planning

found that New Jersey communities would save \$1.3 billion in infrastructure costs over 20 years by avoiding sprawl development.¹³

A notable illustration of avoided infrastructure costs is the case of Sterling Forest State Park, 19,000 acres in the middle of the New York-New Jersey Highlands region that sits at the headwaters of reservoirs and is a major source of drinking water for 2 million New Jersey residents. In 1998, the states of New York and New Jersey, the federal government, and private interests worked together to raise \$55 million to purchase 15,000 acres of Sterling Forest and preserve it as open space. New Jersey dedicated \$10 million for its preservation, plus contributed an additional \$1 million in 2000 for the purchase of the remaining 4,000 acres.

The Governor's Office estimated that New Jersey would have had to spend \$150 million to build additional water treatment facilities, plus annual maintenance costs, if the land were developed.¹⁴ Sterling Forest will now naturally cleanse and continue to provide clean water for generations to come, at a fraction of the cost, had the land been developed. At the same time, the preservation of Sterling Forest provides all the other benefits of the preserved land, including flood control, wildlife habitat, air purification and recreational opportunities.

¹³ Rutgers University Center for Urban Policy Research, Edward J. Bloustein School of Planning and Public Policy, The Costs and Benefits of Alternative Growth Patterns: The Impact Assessment of the New Jersey State Plan, September 2000.

¹⁴ The Bergen Record, "Saving Sterling Forest," February 10, 2000.



Former Koelher Tract now part of the Highlands Greenway (*Green Acres Program, NJDEP*)

Property Values and Taxes

Preserved open space and farmland enhances adjacent property values and reduces the need for new and costly municipal services and infrastructure.

Property Values

A good measure of the economic value of preservation is its effect on real estate market values. Preservation can increase adjacent property values, thus increasing property tax revenue and increasing tourism if access and natural attractions are maintained.

In the example of Atlanta, Georgia's Centennial Olympic Park, in the early 1980s property values in the immediate area were \$2 per square foot; following construction of the park, the value rose to \$150 per square foot.¹⁵

In a review of studies about how property values rise with proximity to natural areas, trails, and greenways, the National Park Service found that, "Property value increases are likely to be highest near greenways that:

- highlight open space rather than highly developed facilities;

- have limited vehicular access, but some recreational access;
- have effective maintenance and security."¹⁶

Property Taxes

Preserving land rather than increasing development – residential or commercial – can reduce the need for additional property tax-supported services and infrastructure development.

These development related costs may include:

- the building of additional educational facilities;
- public services to new homeowners, businesses, and employees, including fire and police protection, health and welfare services;
- construction and maintenance of public utilities (water, sewer, electric, solid waste);
- administration, maintenance and improvement of roads and parking facilities; and
- rising administrative costs related to development-induced growth of local government.¹⁷

Preserved lands require little or no local government services and therefore do not drive up property taxes in the way that poorly planned developments do. Cost of community services studies conducted in more than 83 communities nationwide show that farms and other types of open or natural lands actually generate more in property taxes than they demand in services.¹⁸

¹⁵ Peter Harnick, Urban Land Institute, 2000.

¹⁶ National Park Service, Rivers Trails and Conservation Assistance Program, Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors, 1990 (cited in ANJEC, ANJEC Resource Paper: Open Space Is a Good Investment – The Financial Argument for Open Space Preservation, 2002. www.anjec.org/pdfs/OpenSpaceGoodInvestment.pdf

¹⁷ George S. Hawkins, Esq., "Summary of the Ratables Chase," Stony Brook-Millstone Watershed Association, April 2001.

¹⁸ American Farmland Trust Farmland Information Center, Fact Sheet: Cost of Community Services Studies, September 2001.

Unlike open space, residential land uses are generally a net drain on municipal coffers. In other words, it costs local governments more to provide services to homeowners than residential landowners pay in property taxes. This is exacerbated when the developments are planned for inappropriate places.

Cost of community services studies have shown on average that for every property tax dollar raised from new residential development, the median cost to provide public services is \$1.15. In contrast, the median cost to provide public services to farmland and forest is \$.36.¹⁹

In New Jersey, a survey of revenue-to-expenditure ratios in the townships of Freehold, Holmdel, Middletown, Upper Freehold, and Wall shows that for every \$1.00 generated in taxes from residential development, between \$1.14 and \$1.51 is required in municipal services. For every \$1.00 generated in taxes from farmland, forest and open space, between \$0.33 and \$0.66 is required in municipal services.²⁰

A Burlington County Office of Land Use Planning study of Mansfield Township shows that for every \$1.00 generated in taxes from new residential units, \$1.48 is required for services. In contrast, farmland cost \$0.27 in services for every \$1.00 generated in taxes.²¹ In a similar study, East Amwell Township in Hunterdon County found in 1994 that for every dollar raised from residential development, the

township spent \$1.12 on public services. For every dollar raised by farm and open land, the township spent \$0.30.²²

Studies measuring the effect of all types of development on municipal tax bills find that tax bills generally go up as communities become more developed. Even those communities with the most taxable commercial and industrial properties have higher-than-average taxes.²³



Kuser Mountain
(*Green Acres Program, NJDEP*)

Commercial and light industrial ratables can have unforeseen costs, with increased public spending on services such as police, fire, courts, road maintenance and traffic control. And although new commercial development does not directly raise education costs, over time it stimulates residential development, which ultimately require additional service and infrastructure costs.²⁴

19 American Farmland Trust Farmland Information Center, Fact Sheet: Cost of Community Services Studies, September 2001.

20 American Farmland Trust, 1998 (cited in Fact Sheet: Cost of Community Services Studies, September 2001).

21 Burlington County Farmland Preservation Program, Draft Strategic Plan, 1996 (cited in ANJEC, Resource Paper: Open Space Is a Good Investment – The Financial Argument for Open Space Preservation, 2002. www.anjec.org/pdfs/OpenSpaceGoodInvestment.pdf).

22 East Amwell Agricultural Advisory Board, Valerie Rudolph, "Cost of Community Services Study," 1994 (cited in ANJEC, Resource Paper: Open Space Is a Good Investment – The Financial Argument for Open Space Preservation, 2002. www.anjec.org/pdfs/OpenSpaceGoodInvestment.pdf).

23 Deb Brighton, Community Choices: Thinking Through Land Conservation, Development, and Property Taxes in Massachusetts, Boston, MA: The Trust for Public Land, 1999 (cited in AFT Fact Sheet). 20 East Amwell Agricultural Advisory Board, Valerie Rudolph, "Cost of Community Services Study," 1994 (cited in ANJEC, Resource Paper: Open Space Is a Good Investment – The Financial Argument for Open Space Preservation, 2002. www.anjec.org/pdfs/OpenSpaceGoodInvestment.pdf).

24 West Milford Township, New Jersey, Our Environment/West Milford, "The Economics of Open Space." www.ourevironmentweb.org

A study commissioned by the Great Swamp Watershed Association in 1992 found that the 13 Morris County municipalities that added the most ratables over two decades (\$4.2 billion in commercial and industrial property) continued to own 58% of the county's total assets and pay almost exactly the same proportion (57%) of the total taxes levied, thus still paying taxes at the same rate as those that remained "ratable-poor." These "ratable-rich" communities did not see a reduction in their costs of running local government. Also, the tax rate for residential owners in ratable-rich communities did not decrease.²⁵

Personal Financial and Tax Benefits

Increases in property taxes for individual land/homeowners are minimized by smart growth and land preservation, as noted in the previous section. In addition, landowners can realize substantial financial benefits from land preservation through federal and state income, estate and property tax policies. There are many different land protection methods available, from the establishment of a conservation easement to donation of a remainder interest.

A useful resource that is a general guide to the various land protection techniques in New Jersey and associated tax considerations is *The Handbook of Landowner's Options: A Guide to Land Protection in New Jersey*, published in June 2002 by The Nature Conservancy of New Jersey and The New Jersey Natural Lands Trust. A copy may be obtained from:

The Nature Conservancy of New Jersey
Elizabeth D. Kay Environmental Center
200 Pottersville Road, Chester, NJ 07930
Tel: 908-879-7262 Fax: 908-879-2172
or
The New Jersey Natural Lands Trust
Office of Natural Lands Management
Division of Parks and Forestry
Department of Environmental Protection
P.O. Box 404, Trenton, NJ 08625
Tel: 609-984-1339 Fax 609-984-1427



Bobcat (*Division of Fish & Wildlife, NJDEP*)

Environmental Benefits

Water Quality and Quantity

There are many costly consequences of failing to preserve land. Natural lands permit rain to filter through the ground, a process that helps remove pollutants and recharges water supplies. During dry periods, impaired groundwater recharge threatens the supply as well as the quality of groundwater, lowering the level of water bodies and affecting the quality of our drinking water. In times of heavy precipitation, impervious cover (e.g. pavement) drains runoff pollutants directly to water bodies, thus degrading water quality, increasing drinking water treatment costs, and increasing the risk of flooding.

²⁵ Great Swamp Watershed Association, Leonard W. Hamilton, Ph.D. and Paul B. When, Ph.D., *The Myth of the Ratables*, 1992.
www.gsenet.org/library/12Ind/ratemyth.htm.

Wildlife Habitat

Land preservation conserves biological diversity through conservation of land and water habitats. For example, the preservation of greenway corridors — an interconnected system of open spaces — allows wildlife to migrate and navigate between nesting and foraging areas. In contrast, loss of natural areas causes habitat fragmentation, thereby endangering the viability of certain species.

Air Quality

Increased traffic degrades air quality and increases corresponding health costs. Alternatively, natural lands improve air quality, filtering air pollutants and reducing greenhouse gas emissions through carbon sequestration.

Recreational Benefits

The provision of a variety of quality recreational opportunities throughout our state — quiet open spaces, hiking trails, athletic fields, swimming spots, playgrounds, campgrounds, bike paths — are seen by the public and businesses as necessary to a high quality of life. Greenways provide people with the opportunity to walk, hike and bike between connected open spaces, thus enhancing their recreational experience.

Locales with these attributes more successfully attract and retain quality employers and employees than do places that lack recreational opportunities.

A consortium of companies directly involved in outdoor recreation, in cooperation with key federal agencies, in 1999 sponsored an opinion survey of U.S. residents regarding outdoor

recreational activities and experiences. Roper Starch's public opinion research firm conducted this study of Americans aged 18 and over. Entitled "Outdoor Recreation in the United States, 1999: The Family and the Environment," it was reported that 67% of those surveyed participate in outdoor recreation at least monthly, enjoying activities involving natural resources.

Engaging in recreational activity contributes to the health and well being of individuals and communities. It has also been observed that crime decreases in areas where recreational activity is provided for youth.



D&R Canal
(Green Acres Program, NJDEP)

Educational Benefits

Preserved lands throughout the state — including state parks and forests, and open spaces permanently protected by easement — often offer interpretive and educational program opportunities to the public. These programs provide the state's citizens and others with the opportunity to learn about New Jersey's natural resources as well as its cultural and historic resources.

Through the diverse interpretive and education programs offered, visitors can, for example, gain an understanding of: New Jersey's irreplaceable role in the migration of shore-birds across hemispheres; the importance of preserving and protecting water resources; the need to protect the habitat of endangered flora and fauna, some of which are found only in New Jersey; and interesting facts and important historical lessons seen through the lens of New Jersey's historically important sites and landscapes.

By providing an opportunity to learn about such topics "on site" through first-hand experience, the impact on the audience is more engaging and meaningful. When one is able to stand on a tract over which General George Washington and his army traveled, or stand near tracks left in the sand by a passing red fox, the impact is often greater than through information presented in a book or on the internet. Similarly, first-hand lessons learned standing by a stream that helps to fill a water supply reservoir can foster a new appreciation and understanding of the fact that, ultimately, clean water is not automatically produced at the faucet.

Learning first-hand about New Jersey's agricultural heritage and current agricultural productivity is a valuable educational opportunity for the state's citizens, young and older. Access to local farms can provide lessons in the science, business, economics and technology of agricultural production and renewable natural resource systems.



Monarch Butterfly (*US Fish & Wildlife Service*)

Aesthetic Benefits

Scenic countryside and spacious vistas are valued by residents and visitors, especially in places where open spaces are increasingly scarce. Beautiful places contribute to quality of life in ways perhaps less tangible than direct economic or environmental benefits, but just as, if not more, meaningfully.



Barred Owl, threatened species in New Jersey
(*Division of Fish & Wildlife, Endangered & Nongame Species program, NJDEP*)

For information on New Jersey's preservation programs, efforts and links to key agencies and conservancies, please visit one of the GSPT's website addresses listed below.



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